User Manual

HY-B4024

The Solar Power Station is multi-function equipment
It is widely used to drive house electrical appliances with solar energy
It is very useful for the areas with sufficient sunshine & lack of city electricity or city electricity is not stable
It is very useful for outdoor working
It is also very useful for outdoor camping

1. Notice:

Please read the user manual carefully before using the product
Do not disassembly the products as it is dangerous with high-voltage inside
Do not to drop or shock the product
Do not put your finger or metal materials into the AC output socket and AC input socket of the main body
Please full charge the battery at least one time every one month
Please full charge the battery before long-time storage without use
Please pull out the fuse and turn off the DC and AC switches before long-time storage without use
When the equipment is over-discharged, please better to full charge the battery before use again
Do use our AC Charger only to connect the AC Charging port for the AC charging
Keep it away from children

2. Configuration:

Parts:

Solar Panel	18V40W Poly-Crystalline	1PCS
Solar Panel Cable	10M 2*1.0MM²	1PCS
AC Charger	12V6A	1PCS
Battery inside	12V24Ah – Deep Recycle	1PCS
Controller inside	12V10A – PWM	1PCS
Inverter inside	12V-230V 300W – Pure Sine Wave	1PCS
LED Lamp	DC12V2W	2PCS
Lamp Cable	5M 2*0.5MM² - with switch and holder	2PCS
USB Cable	10-Adapters to Charge Mobile Phones	1PCS
Fuse	20A	2PCS
User Manual	Installation and Using Instructions	1PCS

Surface Plate:

Temperature Sensor	On Controller Plate – Left First	1PCS
Solar Charging Indicator	On Controller Plate – Left Second	1PCS
Battery Voltage Indicator	On Controller Plate – Right	5PCS
Setting Button	On Controller Plate – Below	1PCS
DC Switch	Left – To Control DC 12V & USB 5V Output	1PCS
AC Switch	Right – To Control AC 230V Output	1PCS
Battery Voltage Display Plate	Left	2PCS
AC Output Voltage Display Plate	Right	2PCS
Fuse Base	Middle	1PCS
USB 5V Output Port	Left – For Mobile Charging	2PCS
DC 12V Output Port	Left – For LED Lamps	4PCS
AC 230V Output Port	Right – For Home Appliances	2PCS
Solar Charging Input Port	Back – DC18V2.2A	1PCS
AC Charging Input Port	Back – DC16V6A	1PCS

3. Operation:

a. Place the main body indoor
Note: Keep the main body of the product to be away from water or fine or humid or heat source or direct sunshine
Keep the main body of the products to be vertical;
b. Before using, please plug the fuse to the fuse socket to start the station to work
c. Then the battery indicators will be light up accordingly to indicate the battery capacity

(1) Charging:

A. Solar Charging:
a. Install the solar panel on the roof or exposed place, where with strongest sunshine, then fix it
Note: Make sure the solar panel is far away from any obstacle or any Shadow all the day time
Please let the solar panel directly face to the strongest sunshine in the daytime
Please clear the solar panel from time to time to keep it be clean
b. Plug the solar panel cable port into the solar charging port on the surface of main body "Solar Charging"
Note: Better to keep the connection all the day round to obstacle the most sunshine energy
c. When the solar energy is charging in, the solar panel indicator will be light up

B. AC Charging:
a. Plug the AC charger cable port into the AC charging port on the surface of the main b
b. Then the battery indicator on the AC charger will be light up to indicate the battery ca
c. Plug the AC charger 2-pin port into the AC230V city electricity
d. When the city electricity is charging in, the battery indicator on the AC charger will l

charging

e. Plug out the AC charger 2-pin port from the AC230V city electricity when no need to use AC charging

f. Plug out the AC charger cable port from the AC charging port of the main body

Note: Please following the above process order to keep the goods work well, otherwise the AC charger will maybe broken

(2) Discharging:

A. DC Output:

a. Turn on the DC switch on the main body

b. Then the battery voltage display plate on the main body will be light up to display the battery voltage

c. Then the 4PCS DC12V outputs and 2PCS USB5V output will work

d. For lighting: Screw the 2PCS LED lamps to the lamp cables holder
Plug the lamp cables port into the DC12V light port on the surface of the main body "Light"
Turn on the switch on the lamp cables
Then the LED lamps will be light up
When you don't want to use the LED lamps, please turn off the switch on the lamp cables

e. For mobile charging: Plug the USB cable into the USB5V output port on the surface of the main body "USB"
Plug the mobile charging adapter which match your mobiles into your mobile charging port
Then you can charge your mobile phones

f. Please turn off the DC switch when you don't use the DC12V light output and don't use the USB5V output to save power

B. AC Output:

a. Turn on the AC switch on the main body

b. Then the AC output voltage display plate on the main body will be light up to display the AC output voltage

c. Then the 2PCS AC230V output sockets will work

d. To drive home appliances: To plug the home appliances power port to the AC230V output sockets
Turn on the home appliances
Then the home appliances will work

Note: Please make sure the home appliances total power is ≤300W

Suitable for					
	Notebook computers	radio	television	bulb	fan
Not suitable for					
	refrigerator	microwave	electromagnetism	Air conditioning	Motor

e. Please turn off the AC switch when you don't use the AC230V output to save power

4. Feature:

Battery full-charging time by solar	8hours
Battery full-charging time by AC city electricity	4hours
Battery full-charging time by solar & AC city electricity together	2.7hours
Energy generated by full charged battery	216Wh
Energy generated by sunshine everyday	135Wh

(1) Solar Panel:

The solar panel we use is high-efficient solar panel with best performance

40W Poly-Crystalline Solar Panel	
Rated Power	40W
Operating Voltage	18V
Operating Current	2.22A
Open-Circuit Voltage	21V
Short-Circuit Current	2.38A
Size	635*515*25MM
Test Condition: AM1.5 25℃ 1000W/M²	

(2) Battery:

The battery inside we use is deep-recycle SMF lead acid battery with best performance

24Ah deep-recycle SMF Lead-Acid Battery	
Rated Voltage	12V
Rated Capacity	24Ah @ 10HR(C10)
Operating Temperature	-45~+50℃
Weight	8KG
Size	175*166*125MM
Please full charge the battery at least one time every one month to keep the best performance Please full charge the battery before long-time storage without use	

(3) Controller:

The controller inside we use is PWM controller with best performance

12V10A PWM Controller	
Voltage	DC
Current	1(
Charging Method	3 S

Over-Charge Protection	√
Over-Discharge Protection	√
Over-Load Protection	√
Short-Circuit Protection	√
Reserve Protection	√

(4) Inverter:

The inverter inside we use is pure sine wave inverter with best performance

12V-230V 300W Pure Sine Wave Inverter	
Input	DC12V
Output	AC230V
Frequency	50Hz
Power	300W
Wave Form	Pure Sine Wave
Battery Discharge Protection	√
Over-Temperature Protection	√
Over-Load Protection	√

5. Load:

Please make sure the total power of the home appliances driven is ≤300W

The total power consumption everyday of the home appliances better ≤135Wh & Maximum 216Wh

Home Appliances For Reference			
2PCS DC12V2W LED Lamps	Work 2hours/day	4W	8Wh
2PCS 5W Mobile Charging	1.5hour to full charge	10W	15Wh
1PCS 40W Fan	Work 2hours/day	40W	80Wh
1PCS 50W LCD TV (32inch)	Work 1hours/day	50W	50Wh
Total		**104W**	**153Wh**